

# Good Governance Assessment in Community Forest of Nepal

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## Abstract

The basic for the achievement of the community forestry rests within the Community Forest User Groups (CFUGs). They are responsible to establish good governance, sustainable forest management and improve people's livelihoods. The study aimed to assess the governance score prevailing in CFUGs using stratified random sampling. Our study shows the governance score of 64.17% in community forests with highest 73.94% in Bhotechaur community forest and lowest 56.60% in Tinkanya community forest. Among the eight elements of good governance, consensus-oriented was found highest while responsiveness was lowest in the study area. Further, the independent variables such as well-being ranking ( $\chi^2=21.695$ ,  $df=6$ ,  $p<0.01$ ), source of income ( $\chi^2=20.474$ ,  $df=6$ ,  $p<0.01$ ) and education status ( $\chi^2=17.450$ ,  $df=6$ ,  $p<0.01$ ) has significant impact on governance. Based upon the findings, it is very clear that good governance in CFs are more than average but still not up to the mark. Finally, it calls for rethinking that involving all the stakeholders during planning phases delineating the responsibility and power for correspondents can make possible in achieving sustainability in community forest.

**Key Words:** good governance, CHAL Area, community forest, community forest user groups (CFUGs), sustainability

## Introduction

Community forestry (CF) is increasingly known as one of the key solutions to forest management and governance challenges in the developing world (Sapkota et al. 2020). It is also renowned all over the world as most successful participatory approach (Baral et al. 2019; Joshi et al. 2021). Further, Community based approaches for management of the forest is in increasing trend which is currently estimated at around 732 million hectares that is 28% of the world's forests representing 62 countries (Bhandari et al. 2019). In fact, this strategy of forest management ensures the live-

lihoods improvement of local people which was introduced in Nepal at early 1970s to encourage active participation of local people in the forest management (Bijaya et al. 2016; Joshi et al. 2021). Community forestry (CF) with a forest management approach where local communities are provided with a certain degree of responsibility and authority for the forest management is regarded as the most effective way of addressing the subsistence needs of local people (Khadka et al. 2021). The report from Department of Forests (DoF 2017) states that about 1.45 million households or 35 percent of the population of Nepal is involved in community forestry management program. Till date,

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19,361 Community Forestry User Groups (CFUGs) have been formed of which are composed of 1,072 women only as committee members. A total of 18, 13,478 hectares of National forest have been handed over as community forests and 24, 61,549 households have been benefited.

The total fund collected in the CF account are to be allocated in such a way that 25% of it should contribute the forest development, conservation and management. 35% of the fund should be invested on women, dalits, indigenous and underprivileged groups considering the well-being ranking of CF. Rest of the fund can be spent on community development activities with community consent during general assembly (Community Forestry Division 2014). The multiple goods obtained from the community forests such as timber, fuel wood, fodder/grass, leaf litter, and many non-timber forest products that are part of local people's subsistence and help strengthen the local economy (Khanal and Devkota 2020). Additionally, Government gives rights for forest user groups (FUGs) to access, use, exclusion, and management plan according to their needs but retains ownership through the community forestry (Paudel 2018). Overall, the goal community forestry program in Nepal is to increase participation of the local user in decision-making of forests and gaining benefits (Adhikari et al. 2016; Joshi et al. 2019).

Participation has arisen as an important concept in policymaking (Mollick et al. 2018). Often, all the policy mechanism introduced at regional and global level focused for conservation and limiting forest use of resource of forest dependent communities with alternatives of livelihood improvement (Maryudi et al. 2018). Therefore, effective engagements of people living in and around forests play a vital role in aligning sustainable development (Djomo et al. 2018). Indeed, the good governance at national through local levels reduces inequalities and encourages participatory decision making and sustainable management of forest resources (Piabuo et al. 2018). Likewise, it aids to improve the condition of community forest and feeling of ownership among local communities (Nygren 2005).

The history of community forest starts with Master Plan for Forestry Sector being prominent document for the initiation of community forestry concept in Nepal (Ministry of Forests and Soil Conservation 2014). Later, Forest Act, 1993 gave the legal foundation for community forest mak-

ing government able to hand over forest to community. Further, the procedure for the hand over was explained well in Community Forest Regulation, 1995 backed up with Community Forestry Operational Guidelines giving rigid framework to manage forest (Pokharel et al. 2007; Bhattarai 2016).

Since long back, 'governance' is perceived as establishing, promoting, and supporting a specific type of liaison between governmental and non-governmental bodies in the governing process (Howlett et al. 2009). Further, Barwick et al. (2014) illuminate vitality of good governance for effective management of complex natural resources. Additionally, Lamichhane and Parajuli (2014) also mentioned that the contribution of CF towards supporting the poorest, most vulnerable, and marginalized member of society has been limited within the CFUGs. Moreover, CFUGs can become viable local institutions for sustaining forests and inclusive institutions (Pokharel et al. 2007). On the other hand, customary caste system despite considered illegal by law, the ethnic and gender discrimination are considered barriers in reducing poverty and social inclusion (DFID and World Bank 2006). In fact, the powerful actors of community forest have control over decision-making process; and manipulate as resulting in biasness for poor, disadvantaged and marginalized actors (Yadav et al. 2016). In sum, corruption in this sector is still prevailing, which is threatening the governance (REDD 2015). Therefore to ensure the sustainability of community forestry process as a whole it is very essential to know how the governance is prevailing within it.

Researchers worldwide have highlighted the importance of good governance as a critical condition to the success of community forestry in developing countries (Piabuo et al. 2018). However, there is limited study in Nepal of assessing the good governance of community forest. Hence, the presented study attempts to fill this gap by assessing the good governance to explore and analyse the effectiveness of community forestry.

## Materials and Methods

### *Profile of the study area*

The study was focused on Chitwan Annapurna Landscape (CHAL) area of Nepal. CHAL area was introduced by

WWF, Nepal in 1999 for the holistic management of natural resources through river basin approach. It contains seven major sub-river basins: Trishuli, Marsyandi, Seti, Kali-Gandaki, Budi Gandaki, Rapti and Narayani. The 32,090 km<sup>2</sup> landscape covers 19 districts of central Nepal and elevation ranges from about 100 m in the Terai to over 8,000 m in the Himalaya. Considering the time and fund availability, study was aimed to be done in 2 districts within CHAL landscape i.e. Chitwan and Lamjung. Two community forests from each district were selected setting the following criteria: a) forest handed over at least five years ago; b) active management of community forests; c) heterogeneous forest group from economic view point. Based on those criteria, community forests were selected in consultation with Division Forest office of both Lamjung and Chitwan. Together with this, time and fund availability was also considered in selection of study site for this research work resulting in purposive sampling method for selection of districts and community forests.

Chitwan district lying in terai region of Nepal which extends within the latitude 27°36'21.60" north, longitude 84°22'47.28" east. It covers an area of 2,238.39 km<sup>2</sup> and has the population of 579,984 people (Central Bureau of Statistics 2012). According to DoF (2018), over 21,166.46 hectares of land had been handed over as 87 community forest to total 43,313 households. Out of 87 districts of Chitwan, two community forests were chosen namely; Kalika-deurali community forest and Tinkanya community forest. Kalika-deurali CF is an area of 198.93 hectares. It was handed to 358 households in 2010 A.D. While, Tinkanya CF includes 275 households covering an area of 199 hectares. It was handed over to community in 2010 A.D.

Lamjung district lies in mid-hill region of Nepal. It is extended between latitude 28°16'58.44" North, longitude 84°26'27.24" East having population of 167,724 in the area of 1,692 km<sup>2</sup> (Central Bureau of Statistics 2012). Till this date, 334 community forests were registered and handed over 20,225.87 hectares of land for the direct benefit of 25,404 households (DoF 2018). Out of these, two community forest were chosen. Bhotechaur-Paleko ban CF of 18.97 hectares is being managed by 129 households since 1995 A.D. whereas, 59.75 hectares of Shanti CF is being managed by 315 households since 2000 A. D. The map of studying area showing community forest location is given

below in Fig. 1.

### Methodology

For the assessment of good governance in community forest, eight elements of UNESCAP (2009) were taken into account. It has explicitly listed eight elements as prerequisite for good governance namely: transparency, accountability, rule of law, equity and equality, participation, efficient and effectiveness, consensus oriented, and responsiveness. The local indicators for the community forest were prepared in consultation with Division Forest Office and through the citation of relevant literatures.

To collect the information, firstly we conducted key informant interview (KII) to gain the overall idea of the socio-economic context and the condition of forest management and governance prevailing in community forest. For KII, one having the detailed and concrete information were chosen like ex-president of community forest, school teacher, ward president, forest guard and so on. As Guest et al. (2017) described, two FGD was conducted in each community forest making all total of eight FGD to acquire all essential information. One FGD was conducted with CF user committee and the next one was conducted with under privileged or disadvantaged group within the community for cross-checking and got clear picture of the situation pre-

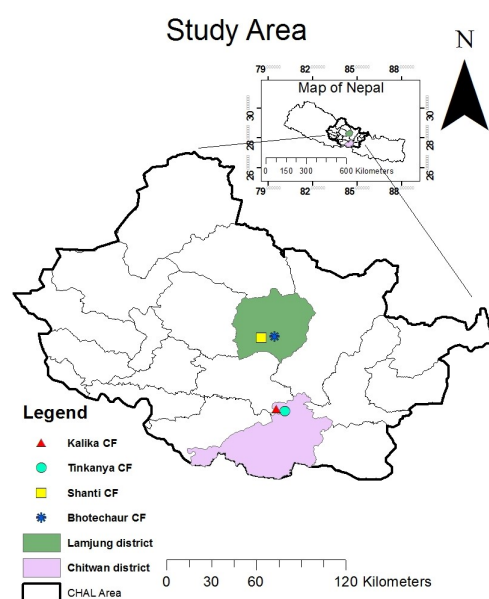


Fig. 1. Map of CHAL area showing the community forests.

vailing in forest management and benefit-sharing. For each FGD, we had at least 8 attendees on an average and friendly environment was created with informal talk so that they can give their opinion for our questions without hesitancy.

The total members from the each of the community forest are the total population for this research. The members are listed and categorized under different strata of well being ranking namely: rich, medium, poor and very poor considering their land ownership, education status and source of income; and well documented as well-being ranking in CF constitution during community forest handover. The representative 10% sample i.e. 110 samples was drawn from 1077 population for the questionnaire interview. Stratified random sampling method was adopted for this study where proportionate samples of interviewees from each category of well-being ranking were collected as shown in the Table 1. The objective of collecting samples from strata was to achieve greater significance of sample and reduce standard error.

Questionnaire survey method was used to collect data on various aspects affecting governance as income source, fund mobilization, transparency, accountability and decision-making process prevailing among community forest user groups. Questionnaire (available in Supplementary document) started with basic demographic information followed by six questions for seven elements and only three for consensus-oriented. Each question of those seven elements holds 1 point for the best possible outcome but for consensus-oriented, best scenario has 2 points. Thus, each element has total score of 6 points for best possible condition and total governance has 48 points from all the elements aggregated. The questionnaire forms were prepared in *mWater Portal* and responses were recorded in phone using *mWater Surveyor* application. The advantage of this application is that it can be used without the internet connection

**Table 1.** Strata of population and samples

Categories	Population	Sample
Rich	215	22
Medium	451	45
Poor	238	25
Very poor	173	18
Total	1,077	110

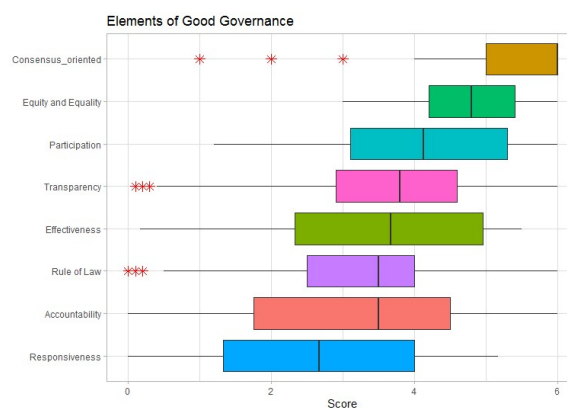
and the data collected offline gets uploaded automatically, once device gets back to internet access. This open data kit system helps to collect data and load them in excel format easily saving time against tedious job of data entry. Thus, the triangulation of data collected from three different sides: KII, FGD and questionnaire survey together with direct observation help to validate the information received from them.

## Results

### *Assessment of good governance*

Good Governance in CFs was accessed by analyzing all its eight elements through the questionnaire survey. The score for each element was identified and got insight for governance pattern. Governance score in CHAL area was found to be 30.80 out of 48 which is 64.17%. Out of eight elements of governance, consensus-oriented got the highest score of 5.25 out of 6 i.e. 87.50%. Similarly, Responsiveness got the lowest score of 2.67 out of 6 i.e. 44.50% in the study area. The boxplot has been presented in Fig. 2 showing the range of responses for each element where elements are arranged vertically in descending manner as per there score.

Results demonstrated that Bhotechaur CF have the highest governance score of 35.49 (73.94%) based on the five elements namely: Effectiveness, Accountability, Transparency, Rule of Law and Equity & equality. Notably, Kalikhola CF indicated the highest score in rest three elements namely Consensus-oriented, Responsiveness and Participation making it the second with the score of 32.26 (68.21%).



**Fig. 2.** Box-plot showing total score of each governance element.

However, Tinkanya CF has the lowest score in four elements: Responsiveness, Participation, Accountability and Equity & Equality resulting the poorest governance condition among all with the score of 27.17 which is 56.60%. Moreover, Shanti CF has the governance score of 28.27 (58.89%) with the lowest score in consensus-oriented, transparency and rule of law. Interestingly, Kalikhola CF has the lowest score in effectiveness among all. Finally, responsiveness, accountability and rule of law are viewed as weak aspect of CFs to attain good governance while remaining five aspects are found better. The pattern of governance are explained in detailed through table below (Table 2). Further, the study of table explains score of each element for each community forest in comparable manner.

#### *Factors affecting the good governance in community forestry*

Table 3 elucidates independent variables which have the impact on the good governance score compared through Chi-square test. From the Table 3 below, it is clear that source of income, education status and well-being ranking have significant impact on governance score at probability of less than 1 percent of opposing outcome. In other words,

households with good income source, good educational qualification and sound economic status will score higher than those having minimal income, poor education and economically weak households. But interestingly sex factors have significant impact on governance score with p value less than 0.05. Further, the outcome of this study shows that male members of community forest gives higher score to the good governance as compared to female member. However, caste factor doesn't have any significant impact on the governance during forest management.

## Discussion

The major constrain to flourishing good governance in CFs of Nepal is lack of knowledge and awareness about it. Except elites with good education or with leadership position, all other members hardly have the idea about governance and its terminologies. We had further simplified the questionnaire while asking to get the answers related to each element. As stated by Kanwoski et al. (2011), forest governance needs to be organic, explored and fostered by community itself for its success. Notably, this study reveals the strength and weakness of CFs in this approach towards

**Table 2.** Good governance score across various elements and community forest

Community forest	Elements of good governance								Total
	Effectiveness	Consensus	Responsive	Participation	Accountability	Transparency	Rule of law	Equity and inclusive	
Kalikhola	3.07	5.58	3.45	4.59	3.46	3.73	3.38	5	32.26
Tinkanya	3.09	5.11	2.30	3.59	2.31	3.44	3.13	4.2	27.17
Bhotechaur	4.81	5.23	2.82	3.99	4.36	4.90	3.88	5.5	35.49
Shanti	3.54	5.06	2.14	3.99	2.41	3.38	2.85	4.9	28.27
Average	3.62	5.25	2.67	4.04	3.14	3.85	3.44	4.90	30.80

**Table 3.** Factors affecting good governance in community forest

Factors	Chi-Square values	Degree of Freedom (d.f)	Cramer's V
1. Sex	8.87*	2	0.28
2. Source of income	20.46**	6	0.31
3. Education status	17.44**	6	0.40
4. Well-being ranking	21.70**	6	0.30
5. Caste	8.55	4	0.28

\* Significant at  $p < 0.05$ ; \*\* Significant at  $p < 0.01$ .

good governance. Out of eight elements of good governance, consensus-oriented scored highest i.e. 5.26 while responsiveness scored lowest i.e. 2.69, which puts on light CFUGs especially their executive committee to be more responsive to all CFUG users. This study clearly explains the lack of responsiveness; and monitoring mechanism should be established in CF. During the focus group discussion, most meeting emphasize on keeping suggestion/complaint box in CFUG's office. The discussion of community forest user committee (CFUC) on those complaint/suggestion during their meeting to incorporate the suggestion or address the complaint of user member and follow-up will make them feel more responsive towards the users. Likewise, CF general assembly agreement for selection of executive committee rather than election is responsible for highest score in consensus oriented. While delay in addressing the people's need for forest resources due to meetings among executive committee and the table work resulted lowest score in responsiveness. Further, it has corroborated Cook et al. (2017) concern for the decentralization of forest management, where responsiveness can be the limiting factor than anything else. Overall, governance score is 64.17% which illustrates the mediocre performance of community forests despite being pioneer in terms of devolution of power to local level for natural resource management. Moreover, comparable study conducted by Lamichhane and Parajuli (2014) had reported 76.38% of governance score in CFs of Gorkha district and considered satisfactory. Additionally, analogous to Dahal (2003), responsiveness, accountability and rule of law were weakly established in CFUGs of Nepal than other five elements of good governance. More specifically, although, women and non-elites are represented in committees abided by laws, lack of knowledge and capacity to lead hinder their decision-making ability, leading to the manipulation of situation for harvesting, resource distribution and use of funds by elites (Baral and Subedi, 2000).

Furthermore, as all the CFs under study had fifty percent of women participation in management committee which opposes the conclusion given by Pokharel and Tiwari (2013). In fact, the community forest management guideline obliges the CF committee to include women in at least one vital position: either. President or Secretary. The community forests were found in line with guideline but women

participation is not meaningful as expected. Women's tendency to give low governance score was substantiated by their weakened role in decision-making and inability to put their opinion firmly. Effective participation is explained by attending meetings, putting their opinion on floor and one's opinions carry weight in the decisions making (Gupte 2004). This aspect within participation has not received considerable attention. Out of four CFs, Bhotechaur CF was the one having more or less homogenous population and comparatively smaller in size leading to its highest score shown below in bar graph (Fig. 3).

In a country like Nepal where hierarchical system exists, there may be restriction in effective participation of such marginalized groups (Agarwal 2009). The heterogeneity in community, particularly source of income, education status and economic well-being plays significant role in governance of CFs. Similar to Pokharel and Tiwari (2013), CFs accomplishment in inclusion of disadvantaged groups of community which positively correlates with this study showing 64% of respondents from non-elite groups. The small CFs with homogenous users tend to have higher governance than any other. The CFs have long way to go for its efficacy, still some of the CF are better in prospects of governance.

The role of multiple stakeholders was also ignored in the study area which also correlates to the results of Timsina (2002), neither the operational plan nor the constitution of the CFs speaks about it. In fact, studies have highlighted financial and technical support by other stakeholders (governments and NGOs) plays vital role in directing communities towards the resources and eventually improve the forest governance (Gupta and Koontz 2019). Meanwhile, the overall function associated with overarching problem is

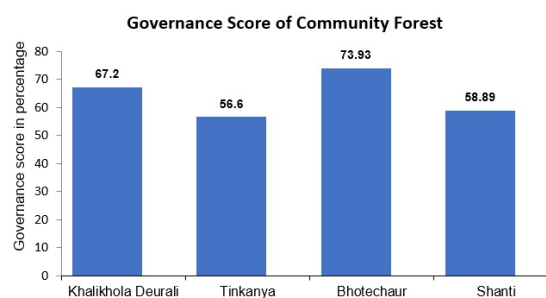


Fig. 3. Barplot showing governance score of each CF.

related with weak governance (Cotic et al. 2017). Likewise, Aryal et al. (2020) mention that the CF program has the potential to make enormous contributions in achieving sustainable development Goals (SDGs) such as SDG 1 (No Poverty), SDG 5 (Gender equality), SDG 6 (Clean water and sanitation), SDG 10 (Reduced inequality), SDG 15 (Life on land), SDG 16 (Peace and justice, strong institutions), and SDG 17 (Partnership to achieve the goal). Finally, formal decision-making process in CFs is highly influenced by the local politics within the community (Devkota 2020) will affect governance which was not considered in this study and remains the area of exploration in further studies.

## Conclusion

The study of good governance based on the CFUG's interviews represents the status of community forestry governance. It is concentrated on four community forests of Chitwan-Annapurna Landscape Area. The research finding revealed governance was above average. In fact, good governance has to be the central theme for management to ensure sustainability of forest. The outcome of this study also demonstrated institutional capabilities of CFUGs are quite conscious on getting consensus for any decision making but same are lagging behind in responsiveness. So, the provision of complaint/suggestion box helps users make user committee more responsive on users concern. The participation of women, poor and disadvantaged groups in committee are in compliance with the current law. Community forest needs to work out on capacity building programs to build up confidence on women and other marginalized groups so they can play role in decision-making and management rather than mere attendance on the meetings. Also, governance status of CFs are significantly affected by major parameters like source of income, well-being ranking and education status. Although, local politica can have greater influence on governance and management system but it was not considered during this study which can be area of exploration for further study. Ultimately, the diagnosis revealed that policy makers should focus on regulatory reform of CFUGs rule and evaluate the potential of CFs to contribute their livelihoods and severals of Sustainable Development Goals.

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